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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,104	12/05/2003	Kwaku O. Prakah-Asante	81093146 (FGT 1900 PA)	3115

7590 09/18/2006

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EXAMINER

CHIN, GARY

ART UNIT PAPER NUMBER

3661

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/729,104	<b>Applicant(s)</b> PRAKAH-ASANTE ET AL.	
	<b>Examiner</b> Gary Chin	<b>Art Unit</b> 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/10/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
The signature of the fourth inventor Jeanette J. Epps is missing in the declaration.

### ***Claim Objections***

2. Claims 6-8, 12 and 14-18 are objected to because of the following informalities:

As per claims 6, 14 and 15, all on line 3, “collision severity” should be “said collision severity” respectively, in order to avoid the antecedent basis problem. Similarly, on claims 7-8 and 17, all on line 3 and claim 16, lines 2-3, “collision contact location” should be “said collision contact location” respectively. On claims 6 and 14, both on lines 4-5, the phrase “at least one collision detection signal” should be “said at least one collision detection signal”.

As per claims 7 and 16, both on lines 7-8, the term “said collision detection signals” lacks proper antecedent basis and should be changed to “the collision detection signals” respectively.

As per claim 12, the dependency should be changed from “claim 9” to “claim 10” in order to provide the antecedent basis for “said plurality of discretized patch sensors”.

As per claim 18, lines 2-3, “said at least one adaptive countermeasure” should be “said at least one countermeasure” in order to avoid the antecedent basis problem.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Kwun (patent no. 5767766) submitted by applicant.

As per claim 1, figure 3 of the Kwun reference clearly discloses the claimed system including a plurality of discretized patch sensors (items 50, 52, 54, 56) and generating at least one collision detection signal and a controller (item 58) coupled to the discretized patch sensors for determining collision type in response to the at least one collision detection signal and performing at least one countermeasure (items 68, 70, 72 and 74) in response to the collision type.

As per claim 4, figure 1 of the Kwun reference discloses that the discretized patch sensors (items 12 and 14) are coupled to a bumper of the vehicle as claimed.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

Art Unit: 3661

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 2, 5-11, 13-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwun.

As per claims 2 and 11, it is noted that the sensors used in the Kwun reference do not partially formed of a poly-vinylidene fluoride material as claimed. However, it would have been readily apparent for one skilled in the art that other type of collision sensors including the ones with the well-known poly-vinylidene fluoride material can be interchangeably employed to provide the same result.

As per claims 5-10, 14 and 16-20, the claimed limitations have been met by the Kwun reference as set forth in the above paragraph with regard to claim 1 with the exception of determining a collision contact location of the vehicle in response to the at least one collision detection signal. However, the Kwun reference in column 6, lines 33-36, discloses the activation of one or more of the restraint systems (items 69, 70, 72 and 74) in response to the analysis of the at least one collision detection signal by the controller (see processor in item 58). It would have been readily apparent for one skilled in the art that the collision contact location of the vehicle must first be determined by the controller (item 58) in order to activate a corrected one or more restraint system in response to the collision detection signal.

As per claim 13, the collision detection sensors (items 50, 52, 54 and 56) in the Kwun reference are non-accelerometer type sensors as required.

8. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwun in view of Gillis et al (patent no. 5445412) also submitted by applicant.

As per claims 3 and 12, the claimed feature of having the discretized patch sensors in a composite form is well known in the art and clearly taught in figure 2 of the Gillis et al reference. A person having ordinary skill in the art would have been motivated to incorporate such well known feature as taught in Gillis et al into the Kwun system so that the arrangement of the sensors can be facilitated.

9. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The additional references are cited to show the related systems. Applicant(s) should consider them carefully when responding to the current office action.

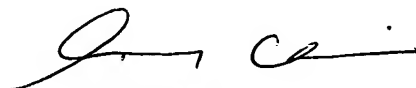
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary Chin whose telephone number is (571) 272-6959. The examiner can normally be reached on Monday-Friday 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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GARY CHIN  
PRIMARY EXAMINER